REMARKS

Claims 1 – 4, 10 and 11 are now pending in the application. Applicant has added Claim 12. Support for the new claim can be found throughout the specification and as such no new mater has been added. The Examiner is respectfully requested to remove the finality of the office action and re-open prosecution on the merits in view of the remarks contained herein.

CONTACT WITH EXAMINER

Applicant thanks the Examiner for the telephone conversation on August 12, 2004. While the references and the claims of record were discussed, along with possible claims amendments, no agreement was reached as to whether the claims or the possible amendments thereto would be allowable.

CLAIM OBJECTIONS

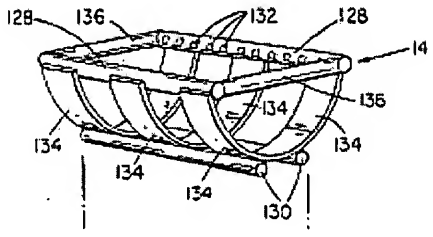
Applicant has amended Claim 1 and Claim 2 to correct minor informalities. As such, the Examiner's objection have been accommodated.

REJECTION UNDER 35 U.S.C. § 103

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Foulke et al. (U.S. Pat. No. 4,493,606, hereinafter Foulke) in view of Hayashi et al. (Japanese Pat. No. JP 8-96471, hereinafter Hayashi). Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Foulke in view of Hayashi, as applied to claim 1 above, and further in view of Hounsfield et al. (U.S. Pat. No. 4,702,667). Claim

4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Foulke, in view of Hayashi, as applied to claim 1 above, and further in view of Becicka et al. (U.S. Pat. No. 5,098,254, hereinafter Becicka). Claims 10 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Foulke in view of Hayashi. These rejections are respectfully traversed.

Applicant claims a rack for storage of multiple assemblies, the rack including side and bottom dunnage including slots for receiving individual assemblies in separate sets of the slots and a sensing hole adjacent one of the slots of each set, as set forth in a portion of Claim 1 and the in applicable portions of Claim 10. The Examiner states that "Foulke et al. shows an apparatus for loading articles (assemblies) into a rack 14 (fig. 5) having side and bottom dunnage 128, 130 . . . ." The pertinent portion of Figure 5 from Foulke is reproduced below. Applicants respectfully submit that Foulke in non-analogous art and is therefore not a proper reference on which to rely for an obviousness rejection, thus rendering the rejection improper. Moreover, Applicant respectfully submits that Foulke is completely devoid of any reference that teaches or suggests dunnage.



Portion of Figure 5 – Foulke Reference

Foulke, in contrast to the present invention, relates to transfer of semiconductor wafers into quartz baskets for processing in a high heat diffusion furnace. (Col. 1, Lines

6 – 29). Foulke discloses a quartz basket 14 that is constructed for use in a diffusion furnace during creation of semiconductor wafers. The diffusion furnace requires temperatures around 800° Celsius, which is well in excess of temperatures in which dunnage for panel assemblies would survive. (Col. 3, Lines 33 – 39).

Foulke is not analogous art with reference to the present invention and therefore is an improper reference upon which an obviousness rejection can rely. The Court of Appeals for the Federal Circuit has held that art, which is not analogous to the claimed invention, cannot render the invention obvious. *See Wang Laboratories v. Toshiba*, 26 USPQ2d 1767, 1774 (Fed. Cir. 1993), *see also Jurgens v. McKasy*, 18 USPQ2d 1031, 1036 (Fed. Cir. 1991). Two criteria are relevant in determining whether the art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the art is not within the same field of endeavor, whether it is still reasonably pertinent to the particular problem to be solved. *Wang Laboratories*, 26 USPQ2d at 1774 (*citing In re Clay*, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992)). Quartz boats, semiconductor wafers and diffusion furnaces that reach temperatures in excess of 800° Celsius are plainly not in the same field of endeavor with the present invention. To that end, the Federal Circuit in *Wang Laboratories* held that the two technologies at issue were not analogous even though both were related to computer memory.

Even if the art is not within the relevant field of endeavor, the art may still be analogous if it is reasonably pertinent to the problem the inventor attempted to solve. *Wang Laboratories*, 26 USPQ2d at 1774 (*citing In re Clay*, 23 USPQ2d at 1060-61). A reference is reasonably pertinent if, even though it may be in a different field from that of

the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *Id.* In *Wang Laboratories*, the design of small memory chips for personal computers was deemed non-analogous to larger memory chips for larger industrial controllers. *Id.* The Federal Circuit therefore decided that one who designs small memory chips for personal computers would not be drawn to the design of larger memory chips, and as such the two technologies were non-analogous. It therefore seems to defy logic and reason that a rack for storage of multiple assemblies including side and bottom dunnage is any way analogous to Quartz boats, semiconductor wafers and diffusion furnaces that reach temperatures in excess of 800° Celsius.

Even if the Examiner determines that Foulke is analogous to the present invention, the Examiner has still failed to establish a prima facie case of obviousness as Foulke and Hayashi, whether considered alone or in combination, fail to teach or suggest all of the claimed limitations of the present invention.

Applicant claims a rack for storage of multiple assemblies, the rack including side and bottom dunnage including slots for receiving individual assemblies in separate sets of the slots and a sensing hole adjacent one of the slots of each set, as set forth in a portion of Claim 1 and the applicable portions of Claim 10. The Examiner states that "Foulke et al. shows an apparatus for loading articles (assemblies) into a rack 14 (fig. 5) having side and bottom dunnage 128, 130 . . . ." Applicant respectfully submits that Foulke is completely devoid of any reference that teaches or suggests dunnage for the plain reason that dunnage cannot exist in a regime in which the quartz boat was

constructed and contemplated by Foulke and therefore the quartz boat cannot include dunnage.

Foulke explains the quartz boat as follows, but in no teaches or suggests dunnage.

> The quartz boat consists of two upper rails 128, and one or two lower rails 130. The upper rails contain slots 132, for receiving wafers. The rails are attached together by three semi-circular bands 134 and two end pieces 136, such that the rails are parallel with respect to each other. Wafers rest in the slots and on top of the bottom rails. Misalignment between the two slotted, upper rails is common, resulting either from errors during the boat's manufacture or from warping of the boat in the diffusion furnaces. (Column 3, Line 64 to Column 4, Line 6).

Moreover, Foulke does not in anyway suggest the use of dunnage because dunnage cannot exist in the regime contemplated by Foulke. The many definitions for dunnage include:

> (1) Mats, boughs, pieces of wood or other loose materials placed under or among goods carried as cargo in the hold of a ship to keep them dry and to prevent their motion and chafing (2) temporary blocking or bracing installed by the shipper in the hold of a ship, in a railroad car, or in a truck to protect freight during shipment (3) cushioning or padding used in a shipping container to protect fragile articles against shock and breakage (4) baggage or personal effects (5) lumber below the recognized merchantable grades. Webster's Third New International Dictionary Unabridged (Merriam-Webster 1993).

As can be seen by the above definition, dunnage cannot reasonably survive in temperatures to which the quartz boat of Foulke is regularly subjected. As such, dunnage is in no way suggested by Foulke.

Because Foulke and Hayashi alone or in combination do not teach or suggest all of the limitations in claims of the present invention, the Examiner has failed to establish a prima facie case of obviousness. The Examiner's contention that Applicant has not

contested the obviousness *per se* of the rejections is also misplaced, as Applicant continues to submit that the Examiner cannot maintain a prima facie case of obviousness. With the inability to establish a prima facie case of obviousness, the finality of the office action is improper and the rejection under 35 U.S.C. § 103(a) is also improper and therefore claims 1 and 10 are in condition for allowance. Claims 2, 3, 4 and 11 are dependant upon claims 1 and 10 and therefore are in condition for allowance for the above set forth reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed. Applicants therefore respectfully request that the Examiner reconsider and withdraw the finality of the office action and all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Final Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this responsive amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: 8/26/04

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